SECTION 13 11 20

SWIMMING POOL RECIRCULATION SYSTEM - ALTERNATE NO. 1

PART 1 -POOL RECIRCULATION SYSTEM

1.1STANDARDS

A. All construction and equipment shall be in accordance with standard industry practices, using new materials to produce a quality, finished product.

1.2 DESCRIPTION OF WORK

- A. It is the intent of this Specification to describe a swimming recirculation system furnished and installed by the Contractor that consists of the following components:
 - 1. Surface Skimmer Overflow System A factory-manufactured perimeter overflow system incorporating components fabricated to the configuration described and as illustrated by the drawings and that performs the functions described herein.

This Specification describes the perimeter overflow system consisting of the following:

- a) Skimmer Body
- b) Floating Weir
- c) Skimmer suction port balancing gate or flap.
- 2. Main drain and associated components.
- 3. Floor Inlets.
- 4. Interconnecting piping.

1.3 WARRANTY & MAINTENANCE INSTRUCTIONS:

A. The recirculation system shall be guaranteed by the contractor for workmanship, materials and performance for a period of one (1) year. This guarantee shall include all labor and material for replacement of any defective materials or work, but shall not include or cover abusive or improper treatment to the recirculation system by others during construction or when operational.

1.4 SURFACE SKIMMER/BOTTOM DRAIN/FLOOR INLET RECIRCULATION SYSTEM

- A. The Contractor shall provide and install a perimeter overflow recirculation system such that under all conditions of normal operation no water be discharged to waste except when cleaning the filters, dilution, or emptying the pool.
- B. Collected "dirty" water from surface and the deepest part of the pool structure shall be conducted to the pump suction port separately. Skimmer and bottom drain lines shall be individually valved so as to afford operator latitude in adjusting the ration of filtered water from the pool surface and bottom.
- C. Filtered water shall be introduced via adjustable floor inlets.

1.5 MANUFACTURERS:

- A. The perimeter overflow recirculation system components shall be as manufactured by Pentair, Hayward or American Products.
- B. The components utilized as the basis for design and their respective catalogue numbers are noted on the project drawings.

1.6 MATERIALS:

A. All recirculation system parts, and fittings, unless otherwise specified, shall be ABS cycolac or PVC

1.7 Adjusting and Cleaning:

A. Following installation and start-up, skimmers shall be balanced by adjusting the flap or gate over the skimmer suction port so that each skimmer draws approximately the same amount of water over its weir.

1.8 MAIN DRAINS

A. The Contractor shall furnish and install main drains as shown on project drawings.

1.9 PRODUCT REQUIREMENTS

- A. Main drain boxes, grating, and piping shall be sized to accommodate 50 % total recirculation rate.
- B. Velocities through grating not shall not exceed 1.5 fps.
- C. Grating shall not have openings greater than one-half inch.
- D. Piping designed for flow rate not exceeding 6 fps.
- E. Main drains and grating shall be certified as compliant with the Virginia Graeme Baker Act.

1.10 FLOOR INLETS

- A. The Contractor shall furnish and install floor inlets as shown on project drawings.
- B. Floor inlets shall include two-inch female pipe threads to accommodate an adjustable diversion plate or a 2" threaded test plug.
- C. Diversion plates shall afford flow regulation of individual inlets. Inlets shall be initially set to provide a uniform flow through each inlet.
- D. Inlet diversion plates shall be locked with a set screw at the proper set point to prevent bather tampering.

PART2 - INTERCONNECTING PIPING

2.1 DESCRIPTION

- A. The Contractor shall supply and install all piping, pipe fittings and valves, as required, from the pool fittings and/or perimeter recirculation system to the juncture of the filter equipment; all piping, pipe fittings and valves from pool main outlet line; sanitizer lines where indicated; all piping and pipe fittings within the filter room required and as shown on the plans; all pipe hangers, rods and supports and other material to complete the intended scope of work.
- B. Any item of equipment or materials obviously a part of the filters and pool recirculation systems and necessary to their operation, but not specifically mentioned in the specifications or shown on the drawings shall be furnished and installed by the Contractor as part of his work at no extra cost to the Owner.
- C. Workmanship All materials to be used in this work shall be installed by workmen thoroughly skilled in their trade and all work shall present a neat and mechanical appearance when complete.

2.2 PIPING MATERIALS

- A. All new process piping whether buried or above grade shall be polyvinyl chloride (PVC) plastic pipe, type 1-1220, Schedule 80 IPS, or as noted below.
- B. All pipe fittings shall be molded regardless of pipe size.

2.3 MAIN DRAIN PIPING

- A. Underneath Pool Shell Piping shall be Schedule 80 polyvinyl chloride (PVC) plastic pipe with similar fittings.
- B. Outside Pool Shell Piping shall be Schedule 80 polyvinyl chloride (PVC) plastic pipe with similar fittings.

PART 3 - HYDROTHERAPY FITTINGS

3.1 DESCRIPTION OF WORK

A. The Contractor shall furnish and install hydrotherapy fittings along the deep area bench as shown on the drawings.

Coatesville VAMC Renovate Building 69 Coatesville, PA 19320 January 22, 2014 Issued for Bid Project No. 542-CSI-203

B. Fittings shall be Hayward, model SP-1430 with SP-1022S wall fittings and SP-1419E Eyeball inlet fitting or equivalent products.